WHAT IS CLAIMED IS:

1. An umbilical comprising:

a plurality of steel tubes helically wound around a core; and

at least one substantially solid steel rod helically wound around said core, said steel rod being arranged in a void between said steel tubes..

2. The umbilical of claim 1, further comprising at least one elongated umbilical element selected from the group consisting of thermoplastic tubes, optical fiber cables, and electrical power and communications cables.

3. The umbilical of claim 2, further comprising a non-metallic outer sheath surrounding and in direct contact with at least some of said plurality of steel tubes and said elongated umbilical elements.

4. The umbilical of claim 3, wherein said at least one steel rod is in direct contact with said non-metallic outer sheath.

5. The umbilical of claim 1, wherein said at least one steel rod is made of solid steel.

6. A method of increasing the hydrodynamic stability of an umbilical comprising a plurality of steel tubes helically wound around a core,

said method comprising the step of arranging at least one substantially solid steel rod in a void between said steel tubes and helically wound around said core.

7. The method of claim 6, further comprising the step of helically winding around said core at least one elongated umbilical element selected from the group

consisting of thermoplastic tubes, optical fiber cables, and electrical power and communications cables.

8. The method of claim 7 further comprising the step of placing a non-metallic outer sheath surrounding and in direct contact with at least some of said plurality of steel tubes and said elongated umbilical elements.

9. The method of claim 8, further comprising the step of placing said at least one steel rod in direct contact with said non-metallic outer sheath.

10. The method of claim 6, comprising the step of making said at least one steel rod of solid steel.

11. The method of claim 6, wherein said umbilical further comprises at least one plastic filler helically wound around said core with said steel tubes,

said method comprising the step of replacing said at least one plastic filler with said at least one steel rod.